

IN THE CLAIMS

1. (currently amended): A process for printing on a porous substrate comprising ink jet printing an ink comprising a dye, and casein and a liquid medium onto the substrate to give a print in which the dye and casein are in contact with each other wherein ~~the casein is applied as a composition comprising a liquid medium~~, the liquid medium comprises water and a water-miscible organic solvent, the weight ratio of water to water-miscible organic solvent is from 95:5 to 70:30 and the dye has a solubility in the liquid medium of at least 10% by weight at 20°C.

2. – 6. (canceled)

7. (previously presented): A process according to claim 1 wherein the substrate comprises filler and binder in a weight ratio of at least 2:1.

8. (original): A process according to claim 7 wherein the filler is clay, calcium carbonate, magnesium carbonate, silica, zeolite, alumina or a combination of two or more thereof.

9. (currently amended): A process according to claim 1 wherein the casein is substantially free from and liquid medium have been purified to lower the content of di- and tri-valent metal ions.

10. – 11. (canceled)

12. (previously presented): A process according to claim 1 wherein the casein and dye are applied to the substrate in the form of an ink comprising:

- (i) 0.1 to 10 parts casein calculated on a 100% solids basis;
- (ii) 0.1 to 15 parts dye; and
- (iii) 99.8 to 74.9 parts of a liquid medium;

wherein the liquid medium comprises water and a water-miscible organic solvent, the weight ratio of water to water-miscible organic solvent is from 95:5 to 70:30 and the dye has a solubility in the liquid medium of at least 10% by weight at 20°C, all parts are by weight, (i)+(ii)+(iii) add to 100 parts and the ink comprises less than 0.1% by weight of di- and tri-valent metal ions.

13. – 14. (canceled)

15. (previously presented): A process according to claim 1 wherein the casein and dye are applied to the substrate in the form of an ink comprising:

- (i) 0.1 to 10 parts casein calculated on a 100% solids basis;
- (ii) 0.1 to 15 parts dye;
- (iii) 0.0001 parts to 0.1 parts of 1,2-benzisothiazolin-3-one;
- (iv) a liquid medium;

wherein the liquid medium comprises water and a water-miscible organic solvent, the weight ratio of water to water-miscible organic solvent is from 95:5 to 70:30 and the dye has a solubility in the liquid medium of at least 10% by weight at 20°C, all parts are by weight, (i)+(ii)+(iii)+(iv) add to 100 parts and the ink comprises less than 0.1% by weight of di- and tri-valent metal ions.

16. (new): A process according to claim 1 wherein the substrate comprises filler and binder in a weight ratio of at least 3.1.